

20-8620



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

645.7810

Job Sheet 213822

Accounting Job SE CAD 139 Valve



Part No: 645.7810

Job Qty: 1 pcs

Part Name: Cable Rod



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/7/20

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 10/19/20

Description:

Type: R+D

Note: 645.7800 REV.N/C IPP REV:A 20.10.07 NEW ISSUE DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	SL-154 - 1	1 pcs	10/19/20		1.00	1.00	Doosan - 1		JB 20.10.09
							NLX 2500SY - 1		
							SL-154 - 1		
							SL-2500Y - 1		
110	QC 2	1 pcs	10/19/20		0.00	0.00	QC 2 - 1		JB 20.10.09
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S305809



Part: 645.7810

Job No: 213822

Serial No/Batch: S305809

Revision: REV.N/C

Inspector:

Exp Date:

Instructions:

Date: 10/09/20

Plex 10/7/20 12:51 PM Dart.lajeunesse.marie

P.T.O.

DAS
62
9-89

DAS
62
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				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
120 QC 8	1 pcs	10/19/20	0.00 0.00	QC 8 - 12	NL 20/10/15
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
				QC 8 - 82	
160 Packaging 3-1 - Stock - B4B	1 pcs	10/19/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	

				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 37 - B4B	
170 QC 21 - SA	1 pcs	10/19/20	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 9	

Part Op **100** - ***CRITICAL PART - EXTREME CARE MUST BE TAKEN*** 1-Machine as per folio F FOLIO REV: AA
 Descriptions: DWG REV: N/C 2-Deburr FD401
110 - QC2- Inspect parts off machine FAI/FAIB
120 - QC8- Inspect parts - second check
160 - Identify as per dwg & Stock ****CRITICAL PART - EXTREME CARE MUST BE TAKEN**** ****MUST ENSURE THE COMPONENTS ARE NEVER DAMAGE****
170 - QC21- Final Inspection - Work Order Release

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
M303R0.313	303 Round Bar .313	.2500 ft (.25 ea)	100-SL-154 - 1	<u>5026900</u>

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-SL-154 - 1	M303R0.313	0	6	0

Part Specifications	
Specifications could not be found.	

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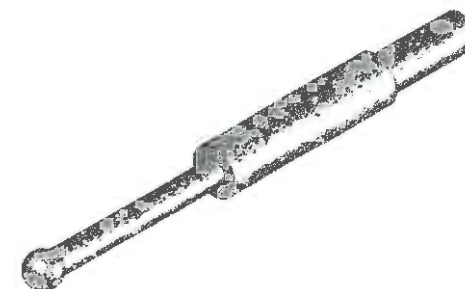
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

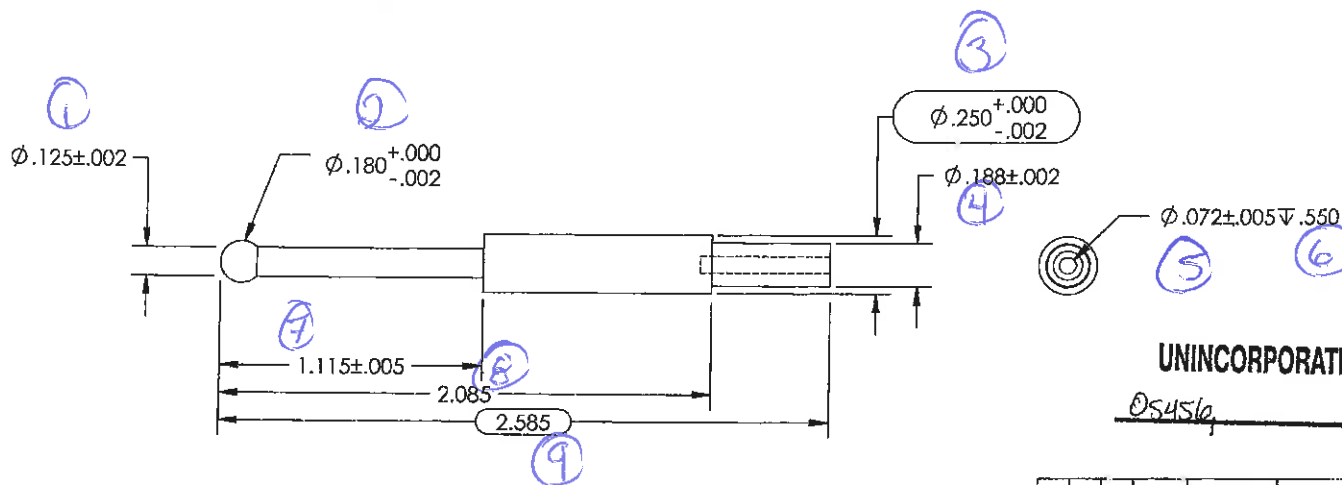
NOTES:

1. DEBURR AND BREAK ALL SHARP EDGES
2. MATERIAL: STAINLESS STEEL 303 1AW AMS-5640
3. IDENTIFY 1AW MPP-120

(10)



645.7810



UNINCORPORATED ECN(S)

054516

1	645.7810	CABLE ROD		
FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
PARTS LIST				
QTY	DESCRIPTION	DATE	BY	CHKD
NEXT ASSY (S)	646.5900	6/1/07	BRAYO	
APICAL INDUSTRIES				
2608 TEMPLE HEIGHTS DR.				
OCEANSIDE, CA. 92056-3512 (760)724-5300				
CABLE ROD				
UNLESS OTHERWISE SPECIFIED				
DIMENSIONS ARE IN INCHES				
TOLERANCES ARE:				
FRACTIONS DECIMALS				
3 PLACES DECIMALS .001				
ANGLES .5°				
SIZE	CAGE CODE	DR. G. NO.	REV.	
B	07M26	645.7800	N/C	
SCALE NONE			SHEET 1 OF 1	

DART AEROSPACE APICAL INDUSTRIES, INC. dba DART AEROSPACE	ENGINEERING CHANGE NOTICE NO. 05456		SHEET 1 OF 1	
	DWG NO. 645.7800	REV: N/C	PREPARED BY G. ORTIZ	DATE: 07/05/16
	EFFECT ON DWG ☐ INC. ☒ UNING.			
DWG TITLE: CABLE ROD				
APPROVED BY: ENGR. <i>[Signature]</i>		MFG. <i>[Signature]</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: ADDED NOTE 4.		
SHEET 1, NOTES IS: NOTES: 1. DEBURR AND BREAK ALL SHARP EDGES 2. MATERIAL: STAINLESS STEEL 303 IAW AMS-5640 3. IDENTIFY IAW MPP-120 4. PASSIVATE IAW MPP-172 SECTION 6.1				ECR: N/A ACTION ITEM: 1.
DOCUMENTS EFFECTED: ☐ PATTERN ☐ MDI ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM				
CHANGE CATEGORY		DER REVIEW REQUIRED		
☐ MAJOR ☒ MINOR		☐ YES ☒ NO		

IS

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Work Order:	213822
Part Number:	645.7810
	Page 1 of 1

[illegible]

H:\FORMS\Quality Assurance\approved QA\Inspection Sheet revB

Ketan Tailor

From: Jacob Becker
Sent: October-15-20 1:44 PM
To: Ketan Tailor
Cc: Steven Drouin
Subject: RE: 645.7810 Deviation for Finish

This is acceptable to use as is.

Regards,

JACOB BECKER
Lead Sustaining Engineer

DART AEROSPACE
T 1 760 509-1639
M 1 760 691-9108

From: Ketan Tailor <ktailor@dartaero.com>
Sent: Thursday, October 15, 2020 10:42 AM
To: Jacob Becker <jbecker@dartaero.com>
Cc: Steven Drouin <sdrouin@dartaero.com>
Subject: 645.7810 Deviation for Finish

Hey Jacob,

During inspection we noticed that the 645.7800 Rev. NC1 had an unincorporated ECN which added a Passivation finish.

Can you please confirm if it is acceptable to use the 645.7810 Cable Rod, as is, without the Passivation finish?

Thanks,
Ketan

CO. 67428 DART
VIRAJ PROFILES LIMITED

NO. 12329
VIRAJ

Regd & Mkt off: G-33 & 34, MIDC, Industrial Area, Tarapur, Thane (Dist), Maharashtra, INDIA - 401506, E-Mail: sales@viraj.com
Works: SURVEY No- 114, 119 & 120, VILL. Mahagaon, Tal: Palgar, Dist: Thane-401501, MAHARASTRA, INDIA, vtel@viraj.com

TEST CERTIFICATE

ORDER NO: PC04082 PACKING LIST NO: 62/995000/1 INSPECTION NO: 100005712489 DATE: 08.09.2015
GRADE: T-303 HEAT NO: 35006

BUNDLE NO:
1100398752

DESCRIPTION
STAINLESS STEEL BRIGHT BARS

COLD DRAWN POLISHED - 2E

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
3/16"	ROUND	ASTM A484	12' - 14'	72	225.000 LB

CHEMICAL ANALYSIS

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0470	1.950	0.460	0.3000	0.0330	17.420	8.070	0.650	0.280	0.150	0.03500

TEST RESULTS

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	Reduction Of Area %	Hardness HRC	Grain Size NOS
57.0	113.0	38.0	57.0	228.0	7.0

SPECIFICATION:

MATERIAL CONFORMS TO DIN 10088-3:2003 COND-A & ASTM A 182/A 182M-11 COND A, ASTM A 388-01, ASTM A 451-10 AMS 5610U TYPE I, EXCEPT MARKING, Q35-764BA2 COND A, EXCEPT MARKING, UNS-S-30300, ASTM A 314-2008, ASTM A 320/A 320M-11 B8F CLASS 1, ASME SA 320 B8F CL1 MIL-S-882 B GRADE AISI 303 & WNR 1.4305.
CERTIFIED AS PER EN 10204-3.1

REMARKS

MATERIAL IS FREE FROM MERCURY CONTAMINATION. FREE FROM WELD OR WELD REPAIRS. MICRO-FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO GOOD. MINIMUM SOLUTION ANNEALING TEMPERATURE 1050°C, SOAKING TIME 1/2 HRS, WATER QUENCHED. MELT SOURCE: AOD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

Q.C. 12/04/15

WORKS INSPECTOR
K.R.K. MURTEY

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.313

PO / BATCH NO.: 038657/5026900

DATE: DEC 7 2017

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 3411
 QUANTITY INSPECTED: 3411
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.313
 THICKNESS RECEIVED: 0.313
 SHEET SIZE ORDERED: A1/A
 SHEET SIZE RECEIVED: A1/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	As per A502
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	Heat # 35006
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>	SIGNED OFF BY: _____		
DATE: <u>DEC 7 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

2R

Date:

U.S. 1 2 3 4 5 6 7 8 9 10 11 12

OCT 27 2020

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



NCR No.

20-8622

Route update only

Job: 213822		DISPOSITION		DEPARTMENT/PROCESS							
Part No. 645.7810		Rework ☐ Scrap ☐ Use-as-is ☒		Skid-tube ☐ Machining ☐ Large Fab ☐		Cross tube ☐ Small Fab ☐ Finishing ☐		Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐		Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐	
Date: 2020-10-05		Sequence #: 100		QTY Affected: 1				MRB (QSI042) 5130 9-85			
Description Work Order Deviation				Disposition				Completed By 82 9-89 OCT 15 2020			
OMIT OUTSOURCING FOR PASSIVATION				THIS CHANGE WAS MADE TO REDUCE LEAD TIME Acceptable per attached E-mail				Lead hand / Supervisor PD 20-10-16 QC / QA Coordinator PD 20-10-16			
Root Cause		FAULT CATEGORY									
Operator ☐		☐ Pressure/Forced		☐ Contamination		☐ Power Loss/Surge		☐ Positioned Wrong			
Manufacturing Process ☐		☐ Bending		☐ Misaligned/off center		☐ Folio/Program		☐ Outside Tolerance			
Equip/Tooling ☐		☐ Crushing		☐ BOM/Route		☐ Grain Direction		☐ Drawing			
Handling/Preservation ☐		☐ Cracks		☐ Broken/Damage/Defect		☐ Weld		☒ Finish			
Material ☐		☐ Crimp/Kink/Ripple/Wave/Twist		☐ Incomplete/Unclear Instructions		☐ Wrong Stock Pulled		☐ Part Lost/Missing			
Product Improvement ☐		☐ Marks/Chatter		☐ Drill Holes		☐ Out of Sequence		☐ Misread			
Process Improvement ☐		☐ Mislabeled		☐ Fit/Function		☐ Off-set/Set-up					
Human Factors ☒		Other/Details:									